

Claims

1. Device for producing expanded flat material, comprising a cutting and expanding device and a coiling device, the starting material for which is a foil web that is guided between cutting rollers supported one above the other, formed of individual upper smooth cutting knives and lower cutting knives forming the cut length through recesses alternately in the cutting area, the expanding device having pairs of toothed belts or the like conveyor means guided over partially driven deflection rollers, which conveyor means hold the foil web at the edges and make it advance by means of the tooth formation, characterized in that the expanding device (10) on both sides of the foil web (1) has respectively one toothed belt pair (18, 19) that guides the foil web (1) vertically upwards with one lateral edge, starting from the horizontal plane, via hinged, optionally rigid, sliding blocks (22, 23 or 30) arranged in the interior area of the toothed belts (18, 19), while the other lateral edge of the foil web (1) is guided vertically downwards in the same manner, i.e., forming a scissor movement, and an expansion of the foil web (1) is formed across the resulting diagonal (foil web 1a).
2. Expanding device according to claim 1, characterized in that the sliding blocks (30) have hinges (29) and these are adjustable in height.
3. Expanding device according to claim 1 and 2, characterized in that the upper sliding block (22) is embodied to be vertically displaceable (arrow 24) to inside of the toothed belt.
4. Expanding device according to claim 1 through 3, characterized in that the sliding surfaces of the upper sliding block (22) and of the lower sliding block (23) are embodied with equidistant spacing as flat planes, or optionally with surfaces provided with a radius (R), which form a gradual transition into the expanded position to produce the foil web (1a).

Abstract

A device is proposed for producing expanded flat material, comprising a cutting and expanding device and a coiling device, the starting material for which is a foil web, the expanding device having toothed belt pairs or the like conveyor means guided over partially driven deflection rollers, which conveyor means hold the foil web at the edges and makes it advance and gives the expanded strip a uniform structure over the entire width. This is characterized in that the expanding device on both sides of the foil web has respectively one toothed belt pair that guides the foil web vertically upwards with one lateral edge, starting from the horizontal plane, via hinged, optionally rigid, sliding blocks arranged in the interior area of the toothed belts, while the other lateral edge of the foil web is guided vertically downwards in the same manner, i.e., forming a scissor movement, and an expansion of the foil web is formed across the resulting diagonal.